

REMARKS

Claim 1 has been amended to indicate that the CLA is 50 to 95% of the fatty acids contained in the total glycerides. Claim 11 has been amended to indicate that the CLA is at least 77% of the fatty acids contained in the total glycerides. Support for the amendment to claims 1 and 11 can be found, for example, in paragraph [0032] and Table 1, respectively, of the specification. Unless otherwise indicated, paragraph number is based on U.S. Patent Publication No. 2007/0141220, which corresponds to the above application. No new matter has been introduced. Applicants respectfully request reconsideration and allowance of claims 1-11 in view of the above amendments and following remarks.

Rejection under 35 U.S.C. §112

The Examiner rejected claims 1-11 under 35 U.S.C. §112, first paragraph, for an alleged lack of written description. The Examiner asserted that the phrase “wherein about 5-98% of the fatty acids contained in the total glycerides are a conjugated linoleic acid” in claim 1 and the phrase “75% of the fatty acids contained in the total triglycerides are a CLA” in claim 11 are not supported in the specification.

Applicants have amended claim 1 to recite that 50% to 95% of the fatty acids contained in the total glycerides are a CLA. Support for this amendment can be found, for example, at paragraph [0032] of the specification, which indicates that ratio of CLA to total fatty acids is 50-95%, i.e., 50/100 to 95/100. As such, the phrase “50% to 95% of the fatty acids contained in the total glycerides are a CLA” is supported by the specification.

Applicants have amended claim 11 to recite that at least 77% of the fatty acids contained in the total glycerides are a CLA. Support for this amendment can be found, for example, in Table 1 of the specification.

Applicants submit that claims 1-11 are sufficiently definite. The Examiner is requested to withdraw the rejection under 35 U.S.C. §112, first paragraph.

Rejection under 35 U.S.C. §103

The Examiner rejected claims 1-11 as allegedly being obvious over Krumhar (U.S. Patent No. 6,432,453) in view of Koike et al. (WO 2002/11552) and further in view of Cain et al. (U.S. Patent No. 6,184,009). The Examiner characterized the Krumhar reference as teaching compositions containing glycerol esters of conjugated linoleic acid (CLA), wherein the glycerol esters can be monoglycerides, diglycerides, triglycerides, and mixtures thereof and cited to the abstract and column 4, lines 7-8 of Krumhar. The Examiner asserted that “[t]he difference between Krumhar and Applicant's claimed invention is the following: specific percentages of the diglyceride; the oil source of the CLA; the specific foods that may include CLA; the specific form of the pharmaceutical containing CLA and the various isometric formations of CLA in the triglyceride.” The Examiner characterized the Koike et al. reference as teaching a fat composition comprising 60% - 100% of a diglyceride (DG) and cited to Tables 1 and 5 for examples of compositions containing greater than 85% DG. The Examiner asserted that it would have been obvious to combine Krumhar in view of Koike et al., and that one of ordinary skill would have been motivated to combine since all teach compositions comprising a mixture of glycerides including diglycerides for food.

Applicants disagree with the Examiner.

The Krumhar reference relates to compositions containing a glycerol ester of CLA and an antioxidant. The glycerol ester can be a monoglyceride, diglyceride, triglyceride, or mixtures thereof. See column 4, lines 4-7. The Krumhar reference indicates that CLA can be randomly esterified to glycerol to produce the monoglycerides, diglycerides, triglycerides, or mixtures thereof, with triglycerides being preferred. See column 5, lines 25-31. The Krumhar reference, however, provides no indication of what percent of each glyceride should be included in a composition. As such, the Krumhar reference does not direct a person of ordinary skill in the art to make compositions containing 80-95% by weight of diglycerides.

The Koike et al. reference relates to compositions containing diglycerides, where the diglyceride contains as its fatty acid constituent, a high percentage of an ω 3-unsaturated fatty acid such as α -linolenic acid. Table 1 of Koike et al. provides the percentage of diglycerides and

the percentage of each fatty acid esterified to the glycerides within the composition. For example, Table 1 of the Koike et al. reference indicates that Invention Product 1 contains 85.1% diglycerides, and that the fatty acids esterified to the DG are composed of 61.6% α -linolenic acid (C18:3), 12.8% oleic acid (C18:1), and 16.4% linoleic acid (C18:2). Invention product 2 contains 81.3% diglycerides, and the fatty acids esterified to the DG are composed of 44.2% α -linolenic acid, 29% oleic acid, and 17.5% linoleic acid.

The Koike et al. reference indicates that Invention products 1 and 2 are more stable than comparative product 4, which contains a similar percentage of diglycerides, but a different profile of fatty acids esterified to the DG. For example, comparative product 4 has 29% α -linolenic acid, 16.4% oleic acid, and 44.8% linoleic acid. See page 22, lines 2-4 and Table 1 of Koike et al. Table 4 of Koike et al. indicates that the change in peroxide value (a measure of oxidative stability) over 5 days is 1.08 and 0.82 for Invention products 1 and 2, respectively. In contrast, the change in peroxide value over 5 days is 8.26 for comparative product 4. Thus, the Koike et al. reference indicates that diglycerides that contain 45% linoleic acid are less stable than the products containing higher percentages of linolenic acid. If one accepts the results presented in the Koike et al. reference as being scientifically accurate, the disclosure of Koike et al. does not provide the motivation for one of ordinary skill in the art to make a diglyceride composition in which CLA represents an even higher percentage (i.e., 50 to 95%) of the fatty acids esterified to the DG. As is known in the art, CLA is less oxidatively stable than linoleic acid. See Yang et al., J. Agric. Food Chem., 2009, 57:4212-4217 (copy enclosed).

The Cain reference does not remedy the deficiencies of the Krumhar and Koike et al. references as it does not direct a person of skill in the art to make a composition containing 80-95% diglycerides, where 50-95% of the fatty acids of the total glycerides are CLA. Thus, the combination of cited references does not render claims 1-11 obvious. The Examiner is requested to withdraw the rejection under 35 U.S.C. §103.

CONCLUSION

Applicants submit that claims 1-11 are in condition for allowance, which action is requested. Please apply the three-month Petition for Extension of Time fee, and any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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